

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Declaration and Power of Attorney

As the below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I hereby claim the benefit under Title 35, United States Code, 119(e) of any United States provisional application(s) identified below:

Provisional application No. 60/266,791 filed, on February 6, 2001.

I believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **APPARATUS AND METHOD FOR USE IN COLLABORATION SERVICES** the specification of which was filed on _____, as application Serial No. _____.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to in this oath or declaration.

I acknowledge the duty to disclose all information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

None

I hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

None

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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I hereby appoint the following attorney(s) with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith:

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FOR "FEDERAL"

I hereby appoint the attorney(s) on ATTACHMENT A as associate attorney(s) in the aforementioned application, with full power solely to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected with the prosecution of said application. No other powers are granted to such associate attorney(s) and such associate attorney(s) are specifically denied any power of substitution or revocation.

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FOIA b 7, b 3, b 6, b 7C, b 7D

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Full name of 5th joint inventor: James David Herbsleb

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Parameter	Value	Unit
Initial concentration	1.0	g/L
Initial pH	7.0	
Temperature	25	°C
Time	0-120	min
Agitation speed	150	rpm
Batch size	100	mL
Adsorbent dose	0.1-1.0	g/L
Adsorption capacity	0.1-1.0	g/g
Equilibrium time	120	min
Desorption agent	0.1M HCl	
Desorption time	0-120	min
Regeneration efficiency	0.1-1.0	%
Reusability	1-5	cycles
Adsorption isotherm	Langmuir	
Adsorption kinetics	Pseudo-second order	
Adsorption mechanism	Chemical adsorption	
Adsorption material	Activated carbon	
Adsorption solution	Water	
Adsorption temperature	25	°C
Adsorption pressure	1.0	atm
Adsorption volume	100	mL
Adsorption concentration	1.0	g/L
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Adsorption adsorption adsorption adsorption adsorption desorption time	0-120	min

Inventor's
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Figure 1 consists of 12 sub-graphs labeled (a) through (l), each showing the growth of *E. coli* O157:H7 in ground beef under different treatment conditions. The y-axis for all graphs is \log_{10} CFU/g, ranging from 0 to 10. The x-axis is time in hours, ranging from 0 to 24. The graphs show various growth curves, with some treatments resulting in higher final counts than others. For example, graph (a) shows a control group reaching approximately 10 \log_{10} CFU/g, while graph (l) shows a treatment that significantly reduces growth, reaching only about 2 \log_{10} CFU/g after 24 hours.

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ATTACHMENT A

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